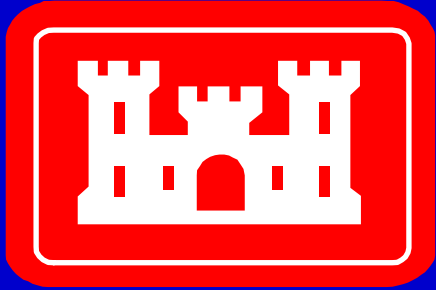
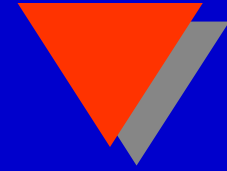


*US Army Corps of Engineers
Safety & Occupational Health
Management During Sep 11, 2001
& Hurricanes Katrina & Rita
Presented by Jim Woodey*

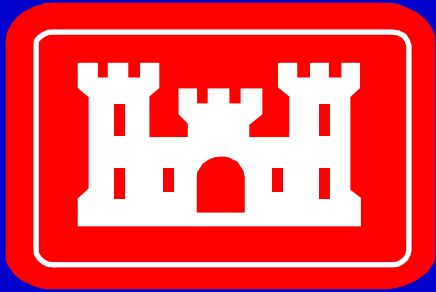


September 11, 2001
Two Topics

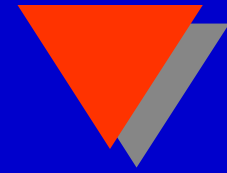


**Overall Project Management at Staten
Island Landfill**

**Follow-up WTC On-site Deployment
Medical Screening**

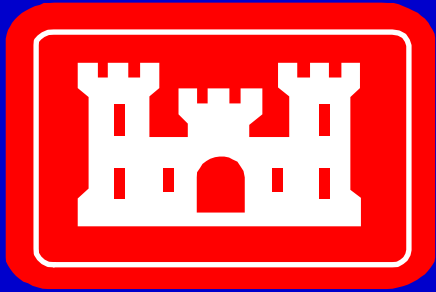


Staten Island Landfill



Overall SOH Management was accomplished by a Unified Health & Safety Plan.

The Purpose of the Plan was to facilitate the cooperation of all Government & Private Entities working on-site so the H&S of all site workers was a priority.



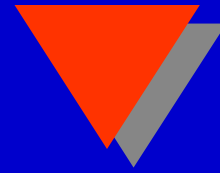
Staten Island Landfill



The below entities contributed to development of the H&S Plan:

USEPA, FBI, USCG, USACE, OSHA, NYPD, N.Y. City Dep. of Sanitation, N.Y. City Dep. Of Health, N.Y. State Dep. Of Environmental Conservation, Phillips & Jordan, Evans Environmental & Geosciences

Follow-up WTC On-site Deployment Medical Screening Started 16 Nov 01



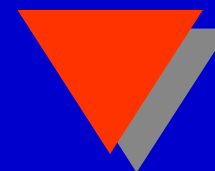
Background: Numerous NY City Firefighters who deployed to WTC on or a week after 11 Sep. have complained of respiratory problems due to potential exposure to airborne contaminants.

Process: Using NY City guidelines, 116 identified Corps employees were E-mailed a Follow-up Medical Screening Packet.

Follow-up Medical Screening is voluntary. However, if any of the 116 employees decline participation, they are to complete a Declination stating they have declined Follow-up Medical Screening.

EM & SOH TAKING CARE OF PEOPLE !

Follow-up WTC On-site Deployment Medical Screening Status By Division Total Employees = 116

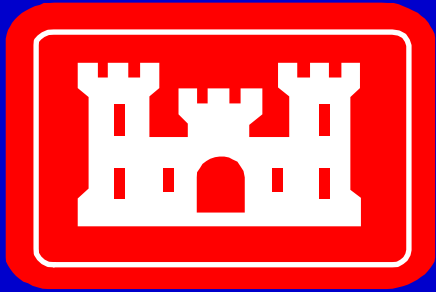


	ERDC	HEC	LRD	MVD	NAD	NWD	SAD	SPD	SWD
Number of Employees	1	1	6	11	33	27	25	8	2
Screened	1	1	5	11	29	27	24	7	1
Exam Recommended			2	8	14	15	11	2	1
Exam <u>NOT</u> Recommended	1	1	3	3	15	12	13	5	
Declination Signed			1		4		1	1	1
Actions Completed									

116 Employees have been Screened or sent in a Declination



EM & SOH TAKING CARE OF PEOPLE !

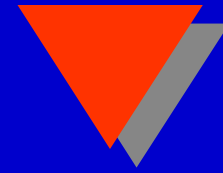
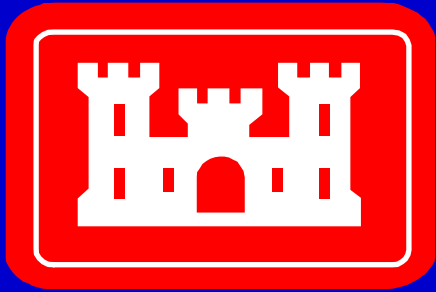


Hurricanes Katrina & Rita

Mission Scope



- ◆ **ROE's: 236,020**
- ◆ **Temporary Roofs: 194,300**
- ◆ **Temporary Housing: 44,155**
- ◆ **Generator Pre-installation inspections: 2,406**
- ◆ **Debris: 63,632,006 cy**
- ◆ **Demolition: 6,908,100 cy**
- ◆ **Sand Removed: 16,463 cy**
- ◆ **FEMA Mission Total: \$4,401,167,000**



USACE SOH Organization Related to Civil Emergency Operations

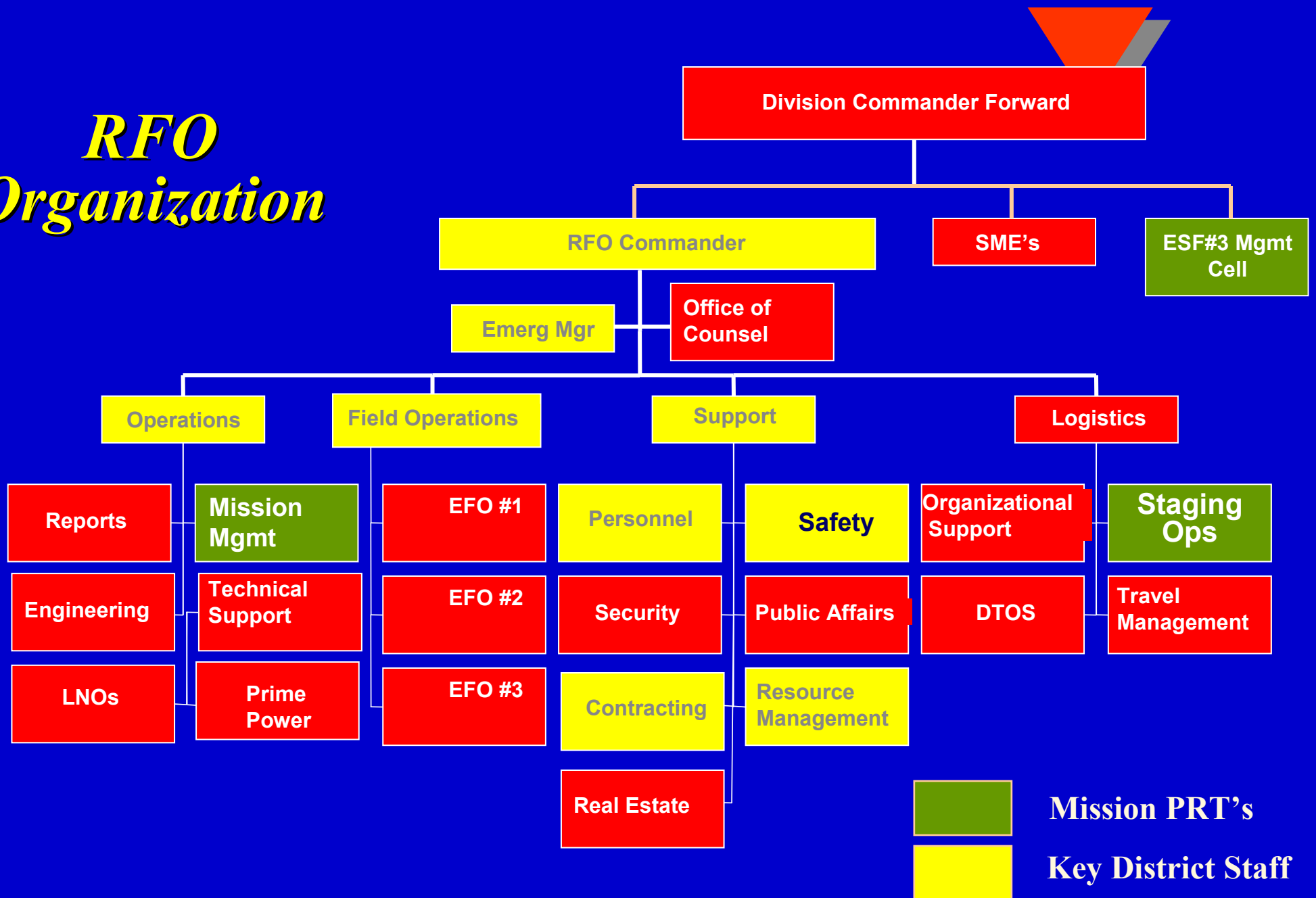
1 National Program Manager

**8 Planning & Response Teams 5 members
each**

Recovery Field Offices (RFO) as Needed

Emergency Field Offices (EFO) as Needed

RFO Organization



Deployable Tactical Operations Center - DTOC



ETOC



Pull Vehicle



40KVA Generator



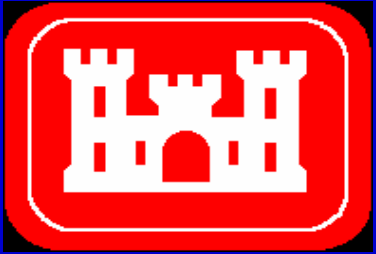
Satcom



ESV



ECCV
(Emergency Command
& Control Vehicle)



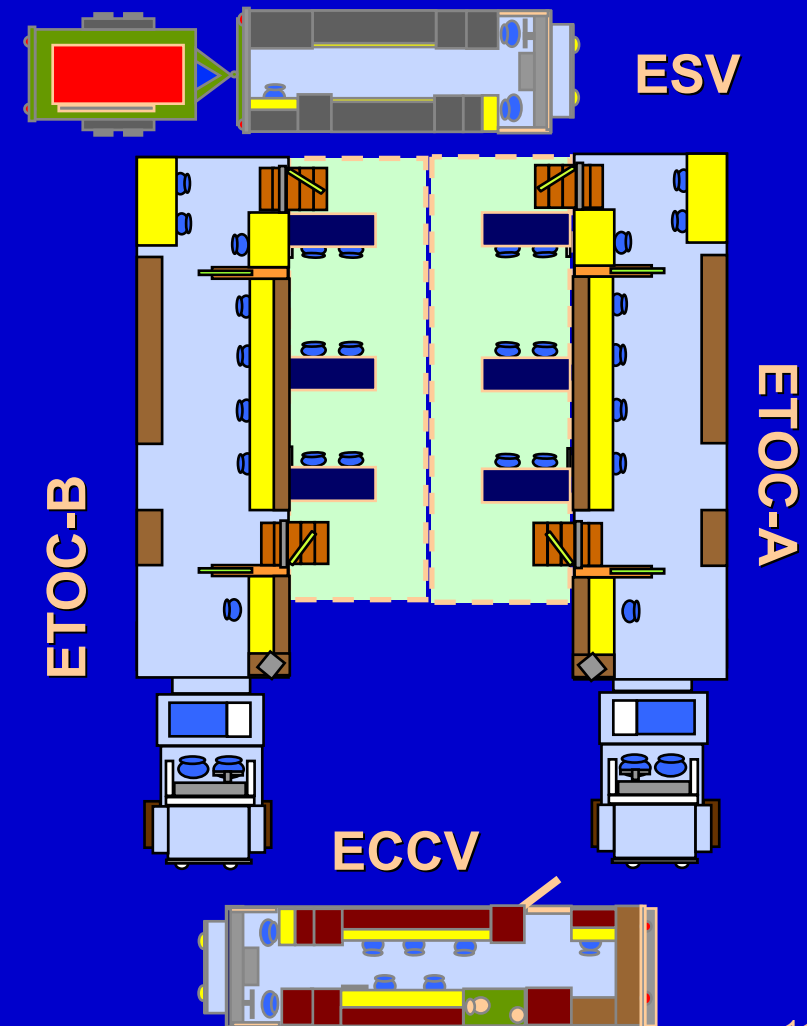
DEPLOYABLE TACTICAL OPERATIONS CENTER (DTOC)

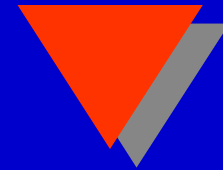
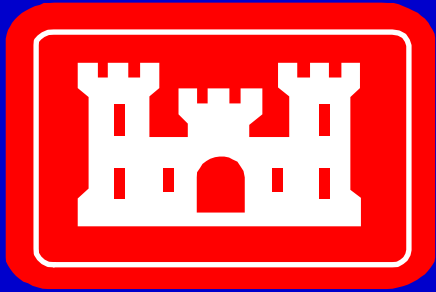
PURPOSE: Four Vehicles Supporting
38 Person Staff for RFO Operations

- 2 Emergency Tactical Operations Centers (ETOC)
- 1 Emergency Support Vehicle (ESV)
- 1 Emergency C² Vehicle (ECCV)

COMPONENTS:

1 Network	26 Computers
Phone Lines	VHF, HF, & CB
Cell Phones	SAT Com
Digital Imagery	GPS Equipment
Photocopiers	Self-Contained Power (40 KW Generator)





RFO SOH Staffing:

1 Mgr.

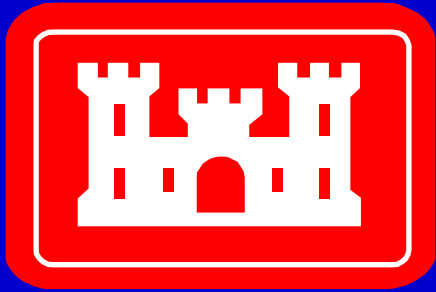
1 IH

1 Nurse

1 Admin

*1 Field Coordinator **





RFO

EFO-N

EFO-E

EFO-S

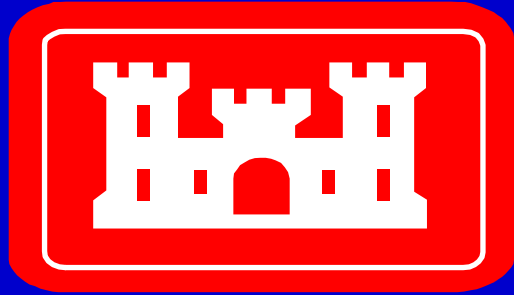
EFO-W

SOH Spec
SOH Spec

SOH Spec

SOH Spec
& IH

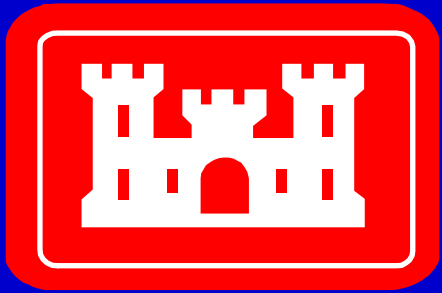
SOH Spec
& IH



Onsite Safety & Occupational Health Lessons Learned



What to do??

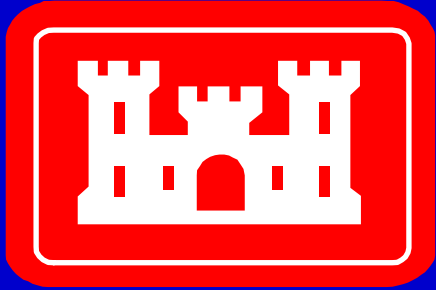


USACE SOH Documents

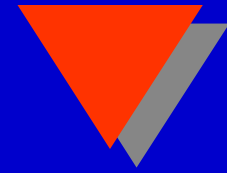
EM 385-1-1 Safety and Health
Requirements Manual 3 Nov 03

EM 385-1-1 Appendix B Emergency
Recovery Operations Lessons Learned
from AARs Documented for Revision

EP 500-1-10 Chapter 7 Field “Toolbox”
Safety and Occupational Health Lessons
Learned from AARs Added to Revised EP



Chapter 7 Our Field “Toolbox”



SOH Orientations & Training

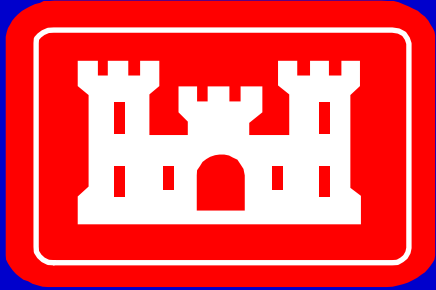
Accident Reporting Logs & Procedures

Possible Environmental Health Hazards

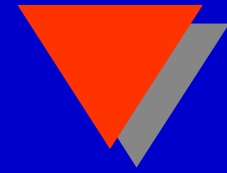
Sample SitReps & Transition Info for RFO & EFO

Contractor Man-hours Formulas

Building Assessment & Demolition



Chapter 7 Our Field “Toolbox”



Position Hazard Analysis

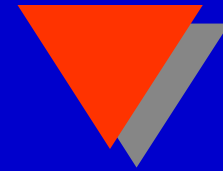
Equipment Checklist

Quality Assurance Representative Checklist

Diagrams

Sample Contractor Activity Hazard Analyses

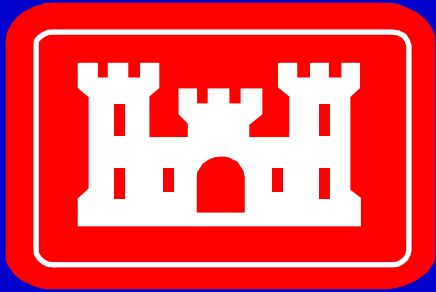
Sample Contractor SOH Submittals



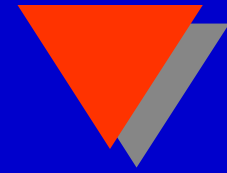
POSITION HAZARD ANALYSIS

Purpose: To identify QAR's major activities, location, hazards, and controls.

Policy: The Position Hazard Analysis shall be utilized by QAR Supervisors as the job specific Safety & Occupational Health indoctrination.



Chapter 7 Our Field “Toolbox”



Position Hazard Analysis

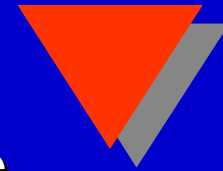
Equipment Checklist

Quality Assurance Representative Checklist

Diagrams

Sample Contractor Activity Hazard Analyses

Sample Contractor SOH Submittals



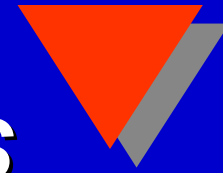
EQUIPMENT CHECKLISTS

Purpose: Assure that all equipment utilized in emergency recovery operations are safe to use.

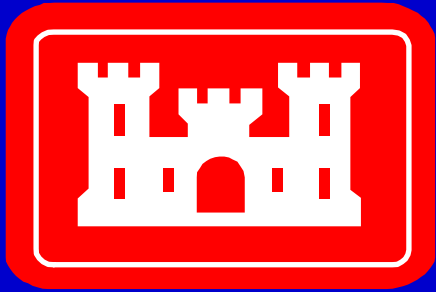
Policy: Before equipment is placed in use, it shall be inspected and certified to be in safe operating condition.



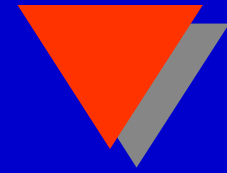
EQUIPMENT CHECKLISTS



- 1. Crawler, Truck & Wheel Mounted Cranes***
- 2. Motor Vehicles, Trailers and Trucks***
- 3. Crawler Tractors and Dozers***
- 4. Scrapers and Motor Graders***
- 5. Chipper, Grinders & Shredders***



Chapter 7 Our Field “Toolbox”



Position Hazard Analysis

Equipment Checklist

Quality Assurance Representative Checklist

Diagrams

Sample Contractor Activity Hazard Analyses

Sample Contractor SOH Submittals

Flagman

MAIN HIGHWAY

7/1/98

Flagman



C&D
Public Disposal

Parking/Port-a-John

Offices

1/4-1/2 MILE



Tower

Tower

ENTIRE SITE = 100 ACRES
Construction & Demolition
(C&D) Debris
Adequate turnaround dumping area

HTW

Ash Pit

Wind

Vegetative Debris

Stop Blocks 50'

Air Curtain Incinerators

15-20'

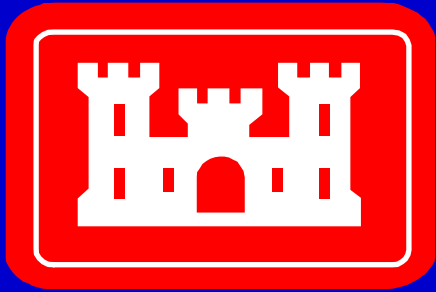
25-30'

300 FT.
Exclusion
Zone

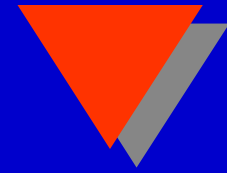
Mulch



Tub
Grinders



Chapter 7 Our Field “Toolbox”



Position Hazard Analysis

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Quality Assurance Representative Checklist

Diagrams

Sample Contractor Activity Hazard Analyses

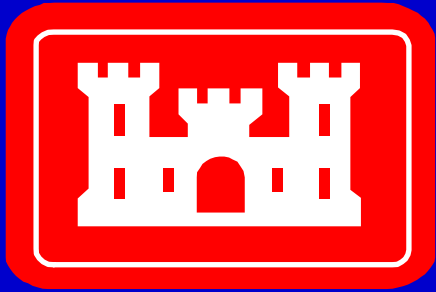
Sample Contractor SOH Submittals



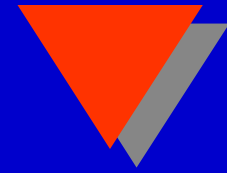
CONTRACTOR ACTIVITY HAZARD ANALYSES (AHA)

Purpose: To identify principal steps, potential hazards and controls associated with the type of work being performed.

Policy: Work will not begin until the AHA has been accepted by the Government's designated authority and discussed with all engaged in the activity.



Chapter 7 Our Field “Toolbox”



Position Hazard Analysis

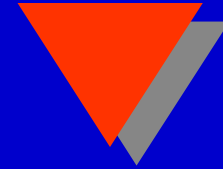
Equipment Checklist

Quality Assurance Representative Checklist

Diagrams

Sample Contractor Activity Hazard Analyses

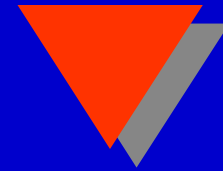
Sample Contractor SOH Submittals



FILL IN THE BLANK CONTRACTOR SOH SUBMITTALS

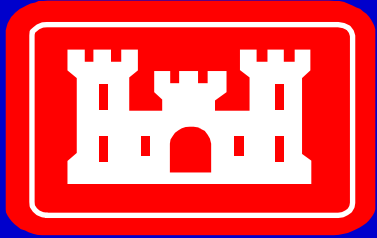
***Purpose: To assure contractors comply with
pertinent requirements of EM 385-1-1.***

***Policy: Work will not begin until appropriate
submittals are accepted by the Governments
designated authority.***

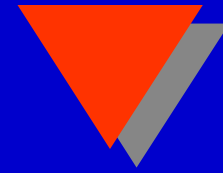


FILL IN THE BLANK CONTRACTOR SOH SUBMITTALS

- 1. On-Site Accident Prevention Plan***
- 2. Hazard Communication Plan***
- 3. Confined Space Entry Plan***
- 4. Control of Hazardous Energy Program***
- 5. Hurricane and Severe Storm Plan***
- 6. Diving Plan and Activity Hazard Analysis***
- 7. Hearing Conservation Program***
- 8. Respirator Protection Program***



RFO SOH Manager



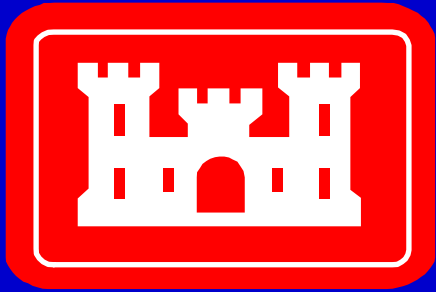
RFO & EFO Staffing & SOH Indoctrinations 3X a Day

Gov & Cont Weekly Manhours Report

Accident Reporting - Two Reports Due Daily – One to OSHA at JFO NLT 15th of Month

Contractor APP Review & Acceptance

Attend: Weekly XO, M/W/F Executive Staff, M/W/F Contractors Safety/Environmental, Weekly Joint Federal Safety, Weekly Area OSHA Joint Safety meetings & Chair two SOH Conference calls weekly



EFO SOH Professional



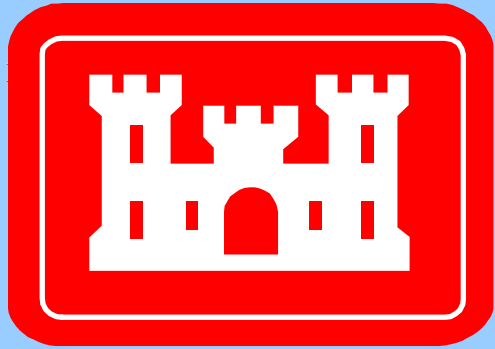
Site Specific SOH Indoctrination

Continuous Onsite SOH Guidance

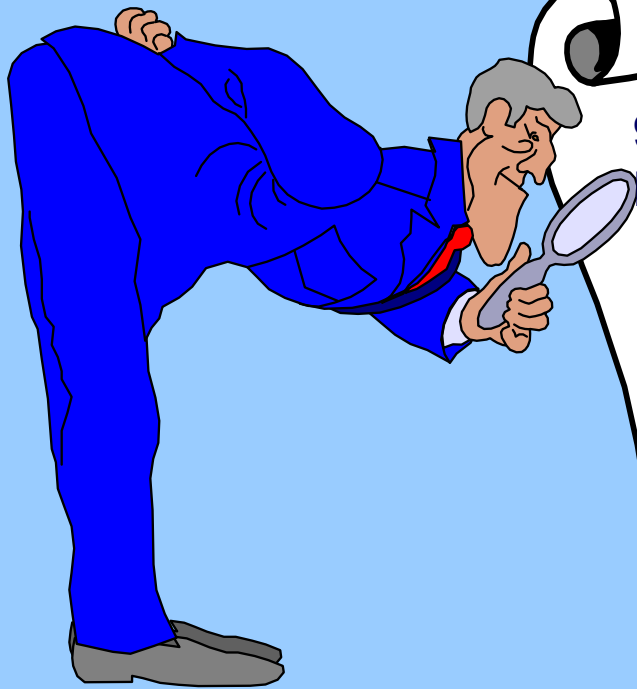
Reviews Contractor SOH Submittals

Daily SitRep to RFO SOH Mgr & Resident Eng

Accident Reporting & Investigation



QUESTIONS ?



**911 Follow-up
Medical Screening
Position Hazard
Analysis (PHA)**

**Equipment
Checklist**

**Personal
Protective
Equipment
(PPE)**



**EP 500-1-10
Chapter 7
SOH**

Diagrams

**Sample
Contractor
SOH
Submittals**

